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CLAIMS

I claim:

21. A drive assembly for a marine mud motor, comprising:

a) an elongate drive tube, configured for rotatably receiving a drive shaft therethrough,

wherein a lower end of the drive tube includes;

b) a drive assembly housing, having a lower end;

5 c) a bearing, in rotational communication between the drive assembly housing and the drive shaft; and

d) a seal, contained within the drive assembly housing, configured to restrict contaminants from entering the drive assembly housing.

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22. A drive assembly as in claim 21, further comprising a seal cap, coupled to the lower end of the drive assembly housing, configured for retaining the seal within the drive assembly housing.

23. A drive assembly as in claim 22, wherein:

a) the lower end of the drive assembly housing has screw threads; and

b) wherein the seal cap has screw threads, to allow the seal cap to be threadably connected to the lower end of the drive assembly housing.

24. A drive assembly as in claim 22, wherein the seal cap includes at least one seal contained within the seal cap.

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25. A drive assembly as in claim 21, wherein the drive assembly housing and the drive tube are an integral unit.

26. A drive assembly for a marine mud motor, comprising:

a) an elongate drive tube having an inside, an outside and a lower end, configured for rotatably receiving a drive shaft therethrough, wherein the lower end of the drive tube includes;

b) an enlarged drive assembly housing having an inside, an outside, an upper end and a lower end, wherein the inside diameter of the enlarged assembly housing is larger than the inside diameter of the elongate drive tube;

c) a bearing, in rotational communication between the enlarged drive assembly housing and the drive shaft; and

d) a seal, contained within the enlarged drive assembly housing, configured to restrict contaminants from entering the enlarged drive assembly housing.

27. A drive assembly as in claim 26, wherein the bearing includes an outside diameter larger than the inside diameter of the drive tube.

28. A drive assembly as in claim 26, further comprising a seal cap, coupled to the lower end of the enlarged drive assembly housing, configured for retaining the seal within the enlarged drive assembly housing.

29. A drive assembly as in claim 26, wherein:

a) the lower end of the enlarged drive assembly housing has screw threads; and

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b) wherein the seal cap has screw threads, to allow the seal cap to be threadably coupled to the lower end of the enlarged drive assembly housing.

30. A drive assembly as in claim 28, wherein the seal cap includes at least one seal contained within the seal cap.

31. A drive assembly as in claim 26, wherein the enlarged drive assembly housing and the drive tube are an integral unit.

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32. A drive assembly for a marine mud motor, comprising:

a) an elongate drive tube having an inside diameter, an outside diameter and a bottom end, configured for rotatably receiving a drive shaft therethrough;

5 b) the bottom end of the elongate drive tube includes an enlarged drive assembly housing having an inside, an outside, an upper end and a lower end, wherein the inside diameter of the enlarged drive assembly housing is larger than the inside diameter of the elongate drive tube;

c) an outer seal, contained within the enlarged drive assembly housing, oriented to restrict fluid from flowing in a direction from the upper end of the enlarged drive assembly housing to the lower end of the enlarged drive assembly housing;

10 d) an inner seal, contained within the enlarged drive assembly housing, oriented to restrict fluid from flowing in a direction from the lower end of the enlarged drive assembly housing to the upper end of the enlarged drive assembly housing, wherein the inner seal is positioned nearer to the upper end of the enlarged drive assembly housing than the outer seal;

e) a pressurization area, formed between the inner and outer seals; and

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15 f) at least one bearing, in rotational communication with the drive assembly housing and the drive shaft, positioned between the inner seal and the upper end of the enlarged drive assembly housing.

33. A drive assembly as in claim 32, wherein the at least one bearing includes an outside diameter larger than the inside diameter of the drive tube.

34. A drive assembly as in claim 32, further comprising a seal cap, coupled to the lower end of the enlarged drive assembly housing, configured to retain the seals within the enlarged drive assembly housing.

35. A drive assembly as in claim 34, wherein:

a) the lower end of the enlarged drive assembly housing has screw threads; and
b) wherein the seal cap has screw threads, and wherein the seal cap is threadably coupled to the lower end of the enlarged drive assembly housing.

36. A drive assembly as in claim 34, wherein the seal cap includes at least one seal contained within the seal cap.

37. A drive assembly as in claim 32, wherein the enlarged drive assembly housing and the drive tube are an integral unit.